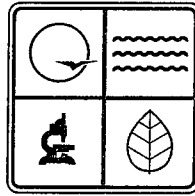


STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI AIR CONSERVATION COMMISSION



PERMIT BOOK

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

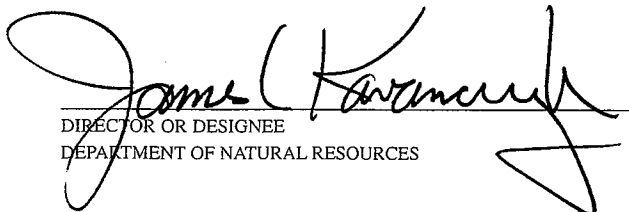
Permit Number: **07 2 006 - 005** Project Number: **2006-03-078**
Owner: **APAC Tennessee Inc., Memphis Division**
Owner's Address: **P.O. Box 13427, 1210 Harbor Ave.**
Installation Name: **Memphis, Tennessee 38113-0427**
Installation Address: **APAC Tennessee Port - 0558**
Location Information: **13588 Brickey's Road, Bloomsdale, MO 63627**
Ste. Genevieve County, S12, 23, 24, T39N, R7E
Application for Authority to Construct was made for:

The installation of a new portable rock crushing plant. The portable rock crushing plant has a maximum hourly design rate (MHDR) of 300 tons per hour (tph). This review was conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

-
- ☐ Standard Conditions (on reverse) are applicable to this permit.
- ☒ Standard Conditions (on reverse) and Special Conditions (listed as attachments starting on page 2) are applicable to this permit.

JUL 19 2006

EFFECTIVE DATE


DIRECTOR OR DESIGNEE
DEPARTMENT OF NATURAL RESOURCES

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available not more than 60 days but at least 30 days in advance of this date. Also, you must notify the Department of Natural Resources Regional Office responsible for the area within which you are located within 15 days after the actual start up of this (these) air contaminant source(s).

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed Special Conditions as provided in RSMo 643.075. If you choose to appeal, the Air Pollution Control Program must receive your written declaration within 30 days of receipt of this permit.

If you choose not to appeal, this certificate, the project review, your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant source(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Department of Natural Resources has established the Outreach and Assistance Center to help in completing future applications or fielding complaints about the permitting process. You are invited to contact them at 1-800-361-4827 or (573) 526-6627, or in writing addressed to Outreach and Assistance Center, P.O. Box 176, Jefferson City, MO 65102-0176.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention Construction Permit Unit.

2006-03-078
PORT-0558

APAC Tennessee Inc., Memphis Division

P.O. Box 13427, 1210 Harbor Ave.
Memphis, Tennessee 38113-0427

APAC Tennessee Port - 0558

13588 Brickey's Road, Bloomsdale, MO 63627

Ste. Genevieve County, S12, 23, 24, T39N, R7E

The installation of a new portable rock crushing plant. The portable rock crushing plant has a maximum hourly design rate (MHDR) of 300 tons per hour (tph). This review was conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

Page No.	2
Permit No.	
Project No.	2006-03-078

GENERAL SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075); by the Missouri Rules listed in Title 10, Division 10 of the Codes of State Regulations (specifically 10 CSR 10-6.060); by 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority"; by 10 CSR 10-6.010 "Ambient Air Quality Standards" and 10 CSR 10-6.060 subsections (5)(D) and (6)(A); and by control measures requested by the applicant, in their permit application, to reduce the amount of air pollutants being emitted, in accordance with 10 CSR 10-6.060 paragraph (6)(E)3. Furthermore, one or more of the Subparts of 40 CFR Part 60, New Source Performance Standards (NSPS), applies to this installation.

1. **Portable Equipment Identification Requirement**
To assure that each component is properly identified as being a part of this portable rock crushing plant, (PORT-0558) APAC Tennessee Port - 0558 shall provide and maintain suitable, easily read permanent markings on each component of the plant. These markings shall be the equipment's serial number or a company assigned identification number that uniquely identifies the individual component. These identification numbers must be submitted to the Air Pollution Control Program no later than 15 days after start-up of the portable rock crushing plant.
2. **Relocation of Portable Rock Crushing Plant**
 - A. If this portable rock crushing plant moves from the initial site reviewed in this permit (APAC Tennessee Brickey's Branch, Site ID No: 186-0021), then the portable rock crushing plant shall not be operated at any site location longer than 24 consecutive months without an intervening relocation.
 - B. A complete "Portable Source Relocation Request" application must be submitted to the Air Pollution Control Program prior to any relocation of this portable rock crushing plant.
 - 1.) If the portable rock crushing plant is moving to a site previously permitted, and if there are no other new plants at the site, then the application must be received by the Air Pollution Control Program at least seven (7) days prior to the relocation.
 - 2.) If the portable rock crushing plant is moving to a new site, or if there are other plants or equipment at the site that have not been evaluated for concurrent operation, then the application must be received by the Air Pollution Control Program at least twenty-one (21) days prior to the relocation. The application must include written notification of any concurrently operating plants.
3. **Operating Permit Applicability**
If this portable rock crushing plant does not move from the initial site (APAC Tennessee Brickey's Branch, Site ID No: 186-0021) within 24 consecutive months, then APAC Tennessee Port - 0558 shall submit an operating permit application. The Air Pollution Control Program must receive this application no later than 30 days after the exceedance of the 24 months.
4. **Record Keeping Requirement**
The operator(s) shall maintain all records required by this permit for not less than five (5) years and shall make them available to any Missouri Department of Natural Resources' personnel upon request.

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Permit No.	
Project No.	2006-03-078

SITE-SPECIFIC SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

Site ID No.: 186-0021
 Site Name: APAC Tennessee Brickey's Branch
 Site Address: 13588 Brickey's Road, Bloomsdale, MO 63627
 Site County: Ste. Genevieve County, S12, 23, 24, T39N, R7E

1. National Ambient Air Quality Standards (NAAQS) Limitation for Particulate Matter Less Than Ten Microns in Diameter (PM₁₀)
 - A. The operator(s) for APAC Tennessee Port - 0558's portable rock crushing plant (PORT-0558) shall ensure, while operating at this site, that the ambient impact of PM₁₀ at or beyond the nearest property boundary does not exceed 150 µg/m³ in any 24-hour period, in accordance with the Federal NAAQS requirements (40 CFR 50.6).
 - B. The total daily ambient impact of PM₁₀ at this site shall include the combined impact of the portable rock crushing plant and any ambient background concentration from installations or equipment located on the same site as the portable rock crushing plant.
 - C. To demonstrate compliance, the operator(s) shall maintain a daily record of material processed. Attachment A, *Daily Ambient PM₁₀ Impact Tracking Record*, or other equivalent form(s), will be used for this purpose.
2. Usage of Chemical Dust Suppressants on Haul Road(s) and Vehicular Activity Area(s)
 - A. The operator(s) shall apply a chemical dust suppressant (such as magnesium chloride, calcium chloride, lignosulfonates, etc.) to the specified unpaved portions of the haul roads and vehicular activity area(s) around the storage pile(s). The suppressant will be applied in accordance with the manufacturer's suggested application rate and re-applied as necessary to achieve control of fugitive emissions from these areas while the plant is operating. Chemical dust suppressants are to be used on the following haul road(s) and vehicle activity area(s): Haul Road #1 (EP15)
 - B. The operator(s) shall record the time, date and the amount of material applied for each application of the chemical dust suppressant agent on the above areas.
3. Usage of Wet Suppression Control System on Equipment
 - A. APAC Tennessee Port - 0558 shall install and operate wet spray devices to restrict the emission of particulate matter. These wet spray devices must be used to control fugitive emissions whenever these units are in operation. The wet spray devices shall be installed on the following units:
 - 1.) Loading with Track hoe Excavator (EP01)
 - 2.) Grizzly Feeder (EP02)
 - 3.) The primary Crusher (EP03)
 - 4.) C-1 Conveyor (EP04)
 - 5.) Secondary Crusher (EP05)
 - 6.) C-2 Conveyor (EP06)
 - 7.) Screen Deck (EP07)
 - 8.) C-3 Conveyor (EP08)
 - 9.) C-4 Conveyor (EP09)
 - 10.) C-7 Conveyor (EP16)
 - 11.) C-8 radial stacker (EP17)
 - 12.) C-9 rerun belt (EP18)
 - 13.) C-10 return belt (EP19)
 - B. Watering may be suspended during periods of freezing conditions, when use of the wet spray devices may damage the equipment. During these conditions, the operator(s) shall adjust the production rate to control fugitive emissions from these units. The operator shall record a brief description of such events in a daily log.

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Permit No.	
Project No.	2006-03-078

SITE-SPECIFIC SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

4. Performance Testing for New Source Performance Standards (NSPS)
 - A. APAC Tennessee Port - 0558 shall submit the enclosed testing plan to the Enforcement section of the Air Pollution Control Program for all equipment applicable to NSPS Subpart "OOO". APAC Tennessee Port - 0558 shall contact the Enforcement section to obtain all requirements for testing, and the plan must be submitted to the Enforcement section at least 30 days prior to the proposed test date.
 - B. Testing must be performed no later than 60 days after achieving the maximum production rate of the process, and in any case no later than 180 days after initial startup. The performance test results shall be submitted to the Enforcement section no later than 30 days after completion of any required testing.
5. Prohibition Against Concurrent Operations Without Further APCP Review

The portable rock crushing plant (PORT-0558) is prohibited from operating whenever any other plant(s) are located at this site, except for the following plant(s):

 - A. APAC Brickey Stone (Permit # 022003-006, Project # 2002-06-061).
 - B. APAC Tennessee Port – 0541(Permit # 102005-004, Project # 2005-08-036)
6. Restriction on Process Configuration of Primary Emission Point(s)

The maximum hourly design rate of the plant is equal to the sum of the design rate(s) of the primary emission point(s). APAC Tennessee Port - 0558 has designated the following unit(s) as the primary emission point(s) of the portable rock crushing plant: primary crusher. Bypassing the primary emission point(s) for processing is prohibited.
7. Restriction on Minimum Distance to Nearest Property Boundary

The primary emission point of the portable rock crushing plant, which is the primary crusher, shall be located at least 1,250 feet from the nearest property boundary whenever it is operating at this site.
8. Record Keeping Requirement

The operator(s) shall maintain all records required by this permit for not less than five (5) years and shall make them available to any Missouri Department of Natural Resources' personnel upon request.
9. Reporting Requirement

The operator(s) shall report to the Air Pollution Control Program (APCP) Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedances of the limitations imposed by this permit.

TECHNICAL REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT

PROJECT DESCRIPTION

Midwest Stone, L. L. C. (Permit # 062005-012, Project # 2005-06-006) will be no longer operating at the site and will be replaced by Port – 0558. Rock, composed of non-metallic minerals, is drilled/blasted, loaded into haul trucks, and transported to processing. Rock is processed through feeder(s), crusher(s), screen(s), conveyor(s), and bin(s). Processing equipment is powered with diesel engine(s). The emission points are listed in the attached spreadsheet summary. This installation is not on the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2]. The installation is located in Ste. Genevieve County, an attainment area for all criteria air pollutants.

EMISSIONS EVALUATION

Criteria air pollutants will be emitted from this operation. The main air pollutant of concern is PM₁₀. The potential emissions were calculated from the maximum hourly design rate (MHDR) of the equipment, appropriate emission factors, control device efficiencies, and the limiting operating hours at MHDR. The sources of the emission factors and control efficiencies are listed in the section "Permit Documents". Based on the conditioned potential emissions, the operation is considered a *de minimis* source under 10 CSR 10-6.060 section (5).

Table 2: Emissions Summary (tons per year)

Air Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions	Potential Emissions of the Application	**New Installation Conditioned Potential	Emission Factor (lb/ton)
PM ₁₀	15.0	N/A	N/A	51.43	32.08	N/A
SO _x	40.0	N/A	N/A	8.81	5.50	N/A
NO _x	40.0	N/A	N/A	69.78	43.53	N/A
VOC	40.0	N/A	N/A	1.79	1.11	N/A
CO	100.0	N/A	N/A	18.54	11.56	N/A
HAPs	10.0/25.0	N/A	N/A	0.03	0.02	N/A

Note: N/A = Not Applicable

** Conditioned potential based on daily production limit from ambient impact analysis. Other pollutants proportionately reduced.

AMBIENT AIR QUALITY IMPACT ANALYSIS

Screening tools were used to evaluate the ambient air impact of the hourly emissions from this operation. The ambient impact was evaluated at a distance of 1,250 feet to the nearest property boundary. The ambient impact at this site shall not exceed the National Ambient Air Quality Standard (NAAQS) of 150 µg/m³ of PM₁₀ at or beyond the nearest property boundary in any single 24-hour period. The screening tools were used to develop an ambient impact factor for the portable rock crushing plant. This ambient impact factor is incorporated into the daily record keeping table, Attachment A.

Table 3: Ambient Air Quality Impact Analysis of PM₁₀, 24-Hour Averaging Time

Operation	Ambient Impact Factor (µg/m ³ /ton)	Modeled Impact (µg/m ³)	Background (µg/m ³)	NAAQS (µg/m ³)	Daily Production Limit (tons)
1. Concurrent Operation same owner APAC Tennessee Port 0558	0.0334	150	0.00	150.00	**
APAC Tennessee Port 0541	0.0337				
APAC Brickey Stone (stationary)	0.0085				

** The operator(s) must balance production among concurrently operating plants, with the ambient impact factors for each, such that NAAQS is not exceeded. Other ambient impact factors are listed in Attachment A.

Ambient air quality modeling was performed to determine the ambient impact of Nitrogen Dioxide (NO_x) site has one (1) diesel engine no closer than 1,250 feet to the nearest property boundary. Ambient impact modeling was performed using screen view the interface for EPA Screen 3 Model. The results of this modeling show the site is in compliance with the annual concentration of NO_x at their property boundary when the generator is 800 feet from the property boundary.

Pollutant	Modeled Impact (µg/m ³)	NAAQS (µg/m ³)	Time Period)
NO _x	0.006	100.00	Annual

APPLICABLE REQUIREMENTS

The owner is subject to compliance with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements.

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
- *Operating Permits*, 10 CSR 10-6.065
- If this portable rock crushing plant remains at the initial site reviewed in this permit longer than 24 consecutive months, then the owner shall submit an Operating Permit Application. The Air Pollution Control Program must receive this application no later than 30 days after the exceedance of 24 months.
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-3.090
- *Restriction of Emission of Particulate Matter From Industrial Processes*, 10 CSR 10-6.400
- *Restriction of Emission of Sulfur Compounds*, 10 CSR 10-6.260
- 40 CFR Part 60 Subpart "OOO", *Standards of Performance for Nonmetallic Mineral Processing Plants*, of the New Source Performance Standards (NSPS)
- The National Emission Standards for Hazardous Air Pollutants (NESHAPs) and the currently promulgated Maximum Achievable Control Technology (MACT) regulations do not apply to the proposed equipment.

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

Samer AL-Shoukhi
Environmental Engineer

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, designating APAC Tennessee Inc., Memphis Division as the owner and operator of the installation.
- Environmental Protection Agency (EPA) AP-42, *Compilation of Air Pollutant Emission Factors; Volume I, Stationary Point and Area Sources, Fifth Edition*.
- Noyes Data Corp. book, Orlemann, et al. 1983, *Fugitive Dust Control*.
- EPA Factor Information Retrieval (FIRE) Version 6.21.
- Spreadsheet calculations of potential-to-emit and ambient impact.
- Southwest Regional Office Site Survey.

Attachment A: Daily Ambient PM₁₀ Impact Tracking Record
APAC Tennessee Port - 0558, PORT-0558– Portable Rock Crushing Plant
Concurrent Operation

Project Number: 2006-03-078
County, CSTR: Ste. Genevieve County (S12, 23, 24 T39N, R7E)
Primary Unit Size: 300 tph
Distance to Nearest Property Boundary: 1,250 feet

This sheet covers the period from _____ to _____ (Month, Day, Year) (Copy this sheet as needed.)

Date	APAC Tennessee Port - 0558 PORT-0558 Project # 2006-03-078			Plant Name: APAC Tennessee Port – 0541 Plant ID: Permit #:102005-004 Project # 2005-08-036			Plant Name: Plant ID: Permit #:022003-006 Project # 2002-06-061			Plant Name: Plant ID: Permit #:			Back-ground PM ₁₀ Level (µg/m ³)	² TOTAL PM ₁₀ Level (µg/m ³)
	Daily Production (tons)	Ambient Impact Factor (µg/m ³ /ton)	¹ Daily PM ₁₀ Impact (µg/m ³)	Daily Production (tons)	Ambient Impact Factor (µg/m ³ /ton)	¹ Daily PM ₁₀ Impact (µg/m ³)	Daily Production (tons)	Ambient Impact Factor (µg/m ³ /ton)	¹ Daily PM ₁₀ Impact (µg/m ³)	Daily Production (tons)	Ambient Impact Factor (µg/m ³ /ton)	¹ Daily PM ₁₀ Impact (µg/m ³)		
		0.0334		N/A	0.0337	N/A	N/A	0.0085	N/A	N/A	N/A	N/A	0.00	
		0.0334		N/A	0.0337	N/A	N/A	0.0085	N/A	N/A	N/A	N/A	0.00	
		0.0334		N/A	0.0337	N/A	N/A	0.0085	N/A	N/A	N/A	N/A	0.00	
		0.0334		N/A	0.0337	N/A	N/A	0.0085	N/A	N/A	N/A	N/A	0.00	
		0.0334		N/A	0.0337	N/A	N/A	0.0085	N/A	N/A	N/A	N/A	0.00	
		0.0334		N/A	0.0337	N/A	N/A	0.0085	N/A	N/A	N/A	N/A	0.00	
		0.0334		N/A	0.0337	N/A	N/A	0.0085	N/A	N/A	N/A	N/A	0.00	
		0.0334		N/A	0.0337	N/A	N/A	0.0085	N/A	N/A	N/A	N/A	0.00	
		0.0334		N/A	0.0337	N/A	N/A	0.0085	N/A	N/A	N/A	N/A	0.00	
		0.0334		N/A	0.0337	N/A	N/A	0.0085	N/A	N/A	N/A	N/A	0.00	
		0.0334		N/A	0.0337	N/A	N/A	0.0085	N/A	N/A	N/A	N/A	0.00	
		0.0334		N/A	0.0337	N/A	N/A	0.0085	N/A	N/A	N/A	N/A	0.00	
		0.0334		N/A	0.0337	N/A	N/A	0.0085	N/A	N/A	N/A	N/A	0.00	
		0.0334		N/A	0.0337	N/A	N/A	0.0085	N/A	N/A	N/A	N/A	0.00	
		0.0334		N/A	0.0337	N/A	N/A	0.0085	N/A	N/A	N/A	N/A	0.00	
		0.0334		N/A	0.0337	N/A	N/A	0.0085	N/A	N/A	N/A	N/A	0.00	
		0.0334		N/A	0.0337	N/A	N/A	0.0085	N/A	N/A	N/A	N/A	0.00	
		0.0334		N/A	0.0337	N/A	N/A	0.0085	N/A	N/A	N/A	N/A	0.00	
		0.0334		N/A	0.0337	N/A	N/A	0.0085	N/A	N/A	N/A	N/A	0.00	
		0.0334		N/A	0.0337	N/A	N/A	0.0085	N/A	N/A	N/A	N/A	0.00	
		0.0334		N/A	0.0337	N/A	N/A	0.0085	N/A	N/A	N/A	N/A	0.00	

Note 1: The Daily PM₁₀ Impact (µg/m³) for each plant is calculated by multiplying the Daily Production (tons) by the matching Ambient Impact Factor.
Note 3: The TOTAL PM₁₀ Level (µg/m³) is calculated by summing the Daily PM₁₀ Ambient Impact(s) and the Background PM₁₀ Level. A TOTAL PM₁₀ Level of less than 150 µg/m³ in any 24-hour period indicates compliance.

Mr. Ronald Netemeyer
QC and Permit Manager
APAC Tennessee Inc., Memphis Division
P. O Box 13427, 1210 Harbor Ave
Memphis, TN 38113-0427

RE: New Source Review Permit - Project: 2006-03-078

Dear Mr. Netemeyer:

Enclosed with this letter is your New Source Review permit. Please review your permit carefully and note the special conditions, if any, and the requirements in your permit.

Operation in accordance with the conditions and requirements in your permit, the New Source Review application submitted for project 2006-03-078, and your amended operating permit, if required, is necessary for continued compliance. Please review your amended operating permit, as it will contain all applicable requirements for your portable rock crushing plant, including any special conditions from your New Source Review permit.

The section of the permit entitled "Technical Review of Application for Authority to Construct" should not be separated from the main portion of your permit. The entire permit must be retained in your files. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

If you have any questions regarding this permit, please do not hesitate to contact me at (573) 751-4817, or you may write to the Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale
New Source Review Unit Chief

KH: sak

Enclosures

c: Southeast Regional Office
PAMS File: 2006-03-078
Permit Number: